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TABLE III

LABORATORY TESTS RESULTS				
JOB NUMBER: 990554		05/28/99		
ATTN: Attn		LABORATORY I.D.: 990554-0034		
DATE SAMPLED: 05/26/99		DATE RECEIVED: 05/26/99		
TIME SAMPLED: 12:02		TIME RECEIVED: 12:02		
WORK DESCRIPTION: C		REMARKS:		
TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD
REID EQUIVALENT VAPOUR PRESSURE	5.82*	*1	PSI	ASTM D-5191
RVP CARB CALCULATION	6.08	0.10	PSI	ASTM D-5191 (CARB)
RVP EPA CALCULATION	5.94	0.10	PSI	ASTM D-5191 (EPA)
RVP ASTM CALCULATION	6.73	0.10	PSI	ASTM D-5191 (ASTM)
PRESSURE TOTAL/GRABNER INSTRUMENT				ASTM D-5191

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TABLE IV

LABORATORY TESTS RESULTS				
05/28/99				
JOB NUMBER: 990554		ATTN: Attn		
CLIENT I.D.....	CARBOB 90/10	BASE + 10% ETOH	LABORATORY I.D.....	990554-0039
DATE SAMPLED.....	05/20/99		DATE RECEIVED.....	05/20/99
TIME SAMPLED.....	16:01		TIME RECEIVED.....	16:01
WORK DESCRIPTION.....	CARBOB 90/10		REMARKS.....	1-500ml amber btl

  

TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD	DATE
REID EQUIVALENT VAPOUR PRESSURE		*1		ASTM D-5191	05/28/99
RVP CARB CALCULATION	7.16*	0.10	PSI	ASTM D-5191 (CARB)	
RVP EPA CALCULATION	7.41	0.10	PSI	ASTM D-5191 (EPA)	
RVP ASTM CALCULATION	7.29	0.10	PSI	ASTM D-5191 (ASTM)	
PRESSURE TOTAL/GRABNER INSTRUMENT	8.12	0.10	PSI	ASTM D-5191	

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TABLE V

LABORATORY TESTS RESULTS				
05/28/99				
JOB NUMBER: 990554		ATTN: Attn		
CLIENT I.D.....	CARBOB 90/10 LN	BASE + 10% ETOH	LABORATORY I.D.....	990554-0040
DATE SAMPLED.....	05/20/99	+ 1% 25% NEODOL	DATE RECEIVED.....	05/20/99
TIME SAMPLED.....	16:01	37.5% OPE	TIME RECEIVED.....	16:01
WORK DESCRIPTION.....	CARBOB 90/10 LN	37.5% ATLAS	REMARKS.....	1-500ml amber btl

  

TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD	DATE
REID EQUIVALENT VAPOUR PRESSURE		*1		ASTM D-5191	05/28/99
RVP CARB CALCULATION	6.79	0.10	PSI	ASTM D-5191 (CARB)	
RVP EPA CALCULATION	7.04	0.10	PSI	ASTM D-5191 (EPA)	
RVP ASTM CALCULATION	6.91	0.10	PSI	ASTM D-5191 (ASTM)	
PRESSURE TOTAL/GRABNER INSTRUMENT	7.73	0.10	PSI	ASTM D-5191	

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TABLE VI

LABORATORY TESTS RESULTS				
05/28/99				
JOB NUMBER: 990554		ATTN: Attn		
CLIENT I.D.....	CARBOB 90/10 REVERSE	BASE + 10% ETOH	LABORATORY I.D.....	990554-0042
DATE SAMPLED.....	05/20/99	+ 1% AAE + 75% NEODOL	DATE RECEIVED.....	05/20/99
TIME SAMPLED.....	16:01	+ 12.5% ODE	TIME RECEIVED.....	16:01
WORK DESCRIPTION....	CARBOB 90/10 REVERSE	+ 12.5% ATLAS	REMARKS.....	1-500ml amber btl

  

TEST DESCRIPTION	FINAL RESULT	LIMITS* DILUTION	UNITS OF MEASURE	TEST METHOD	DATE
REID EQUIVALENT VAPOUR PRESSURE		*1		ASTM D-5191	05/28/99
RVP CARB CALCULATION	6.56	0.10	PSI	ASTM D-5191 (CARB)	
RVP EPA CALCULATION	6.80	0.10	PSI	ASTM D-5191 (EPA)	
RVP ASTM CALCULATION	6.67	0.10	PSI	ASTM D-5191 (ASTM)	
PRESSURE TOTAL/GRABNER INSTRUMENT	7.48	0.10	PSI	ASTM D-5191	

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TABLE VII

LABORATORY TESTS RESULTS				
05/28/99				
JOB NUMBER: 990554		ATTN: Attn		
CLIENT I.D.....: CARBOB 90/10 (RECHECK)		LABORATORY I.D.....: 990554-0043		
DATE SAMPLED.....: 05/27/99		DATE RECEIVED.....: 05/27/99		
TIME SAMPLED.....: 16:01		TIME RECEIVED.....: 16:01		
WORK DESCRIPTION....: CARBOB 90/10 (RECHECK)		REMARKS.....: 1-500ml amber btl		

  

TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD	DATE
REID EQUIVALENT VAPOUR PRESSURE		*1		ASTM D-5191	05/28/99
RVP CARB CALCULATION	7.22	0.10	PSI	ASTM D-5191 (CARB)	
RVP EPA CALCULATION	7.47	0.10	PSI	ASTM D-5191 (EPA)	
RVP ASTM CALCULATION	7.34	0.10	PSI	ASTM D-5191 (ASTM)	
PRESSURE TOTAL/GRABNER INSTRUMENT	8.18	0.10	PSI	ASTM D-5191	

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TABLE VIII

LABORATORY TESTS RESULTS				
05/28/99				
JOB NUMBER: 990554		ATTN: Attn		
CLIENT I.D.....: CARBOB 90/10 LN (RECHECK)		LABORATORY I.D.....: 990554-0044		
DATE SAMPLED.....: 05/27/99		DATE RECEIVED.....: 05/27/99		
TIME SAMPLED.....: 16:01		TIME RECEIVED.....: 16:01		
WORK DESCRIPTION.....: CARBOB 90/10 LN (RECHECK)		REMARKS.....: 1-500ml amber btl		

  

TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD	DATE
REID EQUIVALENT VAPOUR PRESSURE		*1		ASTM D-5191	05/28/99
RVP CARB CALCULATION	6.76	0.10	PSI	ASTM D-5191 (CARB)	
RVP EPA CALCULATION	7.01	0.10	PSI	ASTM D-5191 (EPA)	
RVP ASTM CALCULATION	6.88	0.10	PSI	ASTM D-5191 (ASTM)	
PRESSURE TOTAL/GRABNER INSTRUMENT	7.70	0.10	PSI	ASTM D-5191	

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TABLE IX

LABORATORY TESTS RESULTS				
05/28/99				
JOB NUMBER: 990554				
ATTN: Attn				
CLIENT I.D.: CARBOB 90/10 REVERSE (RECHECK) DATE SAMPLED: 05/27/99 TIME SAMPLED: 16:01 WORK DESCRIPTION: CARBOB 90/10 REVERSE (RECHECK)				
LABORATORY I.D.: 990554-0046 DATE RECEIVED: 05/27/99 TIME RECEIVED: 16:01 REMARKS: 1-500ml amber btl				
TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD
REID EQUIVALENT VAPOUR PRESSURE		*1		ASTM D-5191
RVP CARB CALCULATION	6.56	0.10	PSI	ASTM D-5191 (CARB)
RVP EPA CALCULATION	6.80	0.10	PSI	ASTM D-5191 (EPA)
RVP ASTM CALCULATION	6.67	0.10	PSI	ASTM D-5191 (ASTM)
PRESSURE TOTAL/GRABNER INSTRUMENT	7.48	0.10	PSI	ASTM D-5191
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TABLE X

Fuel Summary CARB Gasoline vs CARB Gasoline + AAE10 @ 1000ppm

Test No.	Vehicle	Fuel Tested EPA-75	THC g/mile	CO g/mile	NOx g/mile	CO2 g/mile	CH4 g/mile	NMHC g/mile	MPG
5736	1993 Ford Explorer	CARB Base, Seq#1	0.151	1.697	0.239	524.16	0.027	0.1196	16.183
5736	1996 GMC Jimmy	CARB Base, Seq#1	0.218	2.744	0.288	485.79	0.03	0.1835	17.387
5675	1998 Dodge Ram	CARB Base, Seq#1	0.135	1.427	0.132	582.37	0.021	0.1108	14.566
5682	1991 Geo Prizm	CARB Base, Seq#1	0.348	3.269	0.372	289.68	0.031	0.3129	28.84
5736	1996 Nissan Sentra	CARB Base, Seq#1	0.073	0.772	0.148	289.58	0.008	0.0638	29.323
5734	1994 Nissan Sentra	CARB Base, Seq#1	0.17	1.878	0.368	308.26	0.017	0.1511	27.373
		Average	0.183	1.964	0.258	413.305	0.022	0.157	22.282
Test No.	Vehicle	Fuel Tested EPA-75	THC g/mile	CO g/mile	NOx g/mile	CO2 g/mile	CH4 g/mile	NMHC g/mile	MPG
5691	1993 Ford Explorer	CARB + AAE10, Seq#2	0.18	1.586	0.245	532.46	0.029	0.1479	15.935
5684	1996 GMC Jimmy	CARB + AAE10, Seq#2	0.202	2.524	0.287	493.70	0.028	0.1695	17.125
5686	1998 Dodge Ram	CARB + AAE10, Seq#2	0.194	1.712	0.115	592.59	0.024	0.1662	14.32
5700	1991 Geo Prizm	CARB + AAE10, Seq#2	0.326	3.416	0.41	287.52	0.036	0.2846	29.035
5745	1996 Nissan Sentra	CARB + AAE10, Seq#2	0.074	0.785	0.129	294.62	0.008	0.0659	28.82
5747	1994 Nissan Sentra	CARB + AAE10, Seq#2	0.182	1.869	0.392	308.29	0.018	0.1613	27.369
		Average	0.193	1.982	0.263	418.199	0.024	0.166	22.101
		Deviation +/-	5.66%	0.89%	1.92%	1.18%	7.51%	5.70%	-0.81%



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TABLE XI

Fuel Summary EPA vs EPA + AAE10 @ 1000ppm

Test No.	Vehicle	Fuel Tested EPA-75	THC g/mile	CO g/mile	NOx g/mile	CO2 g/mile	CH4 g/mile	NMHC g/mile	MPG
5706	1993 Ford Explorer	EPA Base, Seq#3	0.223	2.316	0.34	539.82	0.043	0.1743	15.682
5693	1996 GMC Jimmy	EPA Base, Seq#3	0.242	2.882	0.453	499.87	0.042	0.1947	16.893
5692	1998 Dodge Ram	EPA Base, Seq#3	0.249	2.466	0.19	600.43	0.046	0.1965	14.103
5708	1991 Geo Prizm	EPA Base, Seq#3	0.327	3.392	0.446	294.90	0.035	0.2878	28.328
5752	1996 Nissan Sentra	EPA Base, Seq#3	0.165	1.038	0.208	299.19	0.012	0.1514	28.318
5753	1994 Nissan Sentra	EPA Base, Seq#3	0.253	2.952	0.333	315.84	0.023	0.2271	26.562
	Average		0.243	2.508	0.328	425.009	0.034	0.205	21.648
Test No.	Vehicle	Fuel Tested EPA-75	THC g/mile	CO g/mile	NOx g/mile	CO2 g/mile	CH4 g/mile	NMHC g/mile	MPG
5709	1993 Ford Explorer	EPA + AAE10, Seq#4	0.234	2.744	0.351	534.78	0.048	0.1804	15.808
5701	1996 GMC Jimmy	EPA + AAE10, Seq#4	0.324	3.141	0.517	500.54	0.046	0.2711	16.848
5702	1998 Dodge Ram	EPA + AAE10, Seq#4	0.315	3.308	0.227	598.06	0.056	0.2521	14.123
5717	1991 Geo Prizm	EPA + AAE10, Seq#4	0.365	3.952	0.519	294.89	0.034	0.3268	28.235
5758	1996 Nissan Sentra	EPA + AAE10, Seq#4	0.185	1.299	0.187	300.57	0.014	0.1697	28.146
5759	1994 Nissan Sentra	EPA + AAE10, Seq#4	0.30	3.308	0.371	313.13	0.025	0.2712	26.729
	Average		0.287	2.959	0.362	423.663	0.037	0.245	21.648
	Deviation +/-		18.00%	17.99%	10.27%	-0.32%	10.16%	19.45%	0.00%

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TABLE XII

Fuel Summary Gasohol vs Gasohol + AAE00 @ 4800ppm

Test No.	Vehicle	Fuel Tested EPA-75	THC g/mile	CO g/mile	Nox g/mile	CO2 g/mile	CH4 g/mile	NMHC g/mile	MPG
5722	1993 Ford Explorer	Gasohol Base, Seq#5	0.165	1.545	0.251	519.43	0.033	0.1275	16.336
5711	1996 GMC Jimmy	Gasohol Base, Seq#5	0.219	2.359	0.342	495.15	0.037	0.1765	17.083
5710	1998 Dodge Ram	Gasohol Base, Seq#5	0.219	2.102	0.194	589.97	0.047	0.1655	14.367
5727	1991 Geo Prizm	Gasohol Base, Seq#5	0.273	3.804	0.452	283.54	0.037	0.2309	29.549
5764	1996 Nissan Sentra	Gasohol Base, Seq#5	0.118	0.907	0.175	295.48	0.012	0.1046	28.706
5766	1994 Nissan Sentra	Gasohol Base, Seq#5	0.194	2.237	0.388	311.28	0.022	0.1694	27.056
	Average		0.198	1.992	0.30	415.807	0.032	0.162	22.183
Test No.	Vehicle	Fuel Tested EPA-75	THC g/mile	CO g/mile	NOx g/mile	CO2 g/mile	CH4 g/mile	NMHC g/mile	MPG
5726	1993 Ford Explorer	Gasohol + AAE00, Seq#6	0.17	1.48	0.26	515.20	0.035	0.1312	16.472
5770	1996 GMC Jimmy	Gasohol + AAE00, Seq#6	0.231	1.972	0.30	488.00	0.033	0.1938	17.351
5718	1998 Dodge Ram	Gasohol + AAE00, Seq#6	0.223	2.04	0.156	590.74	0.044	0.1733	14.351
5735	1991 Geo Prizm	Gasohol + AAE00, Seq#6	0.283	2.478	0.443	280.95	0.035	0.2436	29.866
5770	1996 Nissan Sentra	Gasohol + AAE00, Seq#6	0.096	0.793	0.135	294.61	0.01	0.0848	28.814
5769	1994 Nissan Sentra	Gasohol + AAE00, Seq#6	0.17	1.846	0.381	314.49	0.019	0.1492	26.842
	Average		0.196	1.768	0.279	413.998	0.029	0.163	22.282
	Deviation +/-		-1.25%	-11.25%	-7.24%	-0.44%	-7.22%	0.16%	0.45%